What Is Claimed Is:

1. An antenna for use on a commercial satellite terminal, comprising:

a generally circular rotating plate for mechanically scanning for wave signals in the azimuth direction;

a plurality of radiation elements positioned on said circular plate for electronically scanning for wave signals in elevation; and

a multiplexor associated with each of said plurality of radiation elements for consolidating the individual wave signals received at each of said plurality of radiation elements to an analog bit stream;

an analog to digital converter for converting said analog bit stream to a digital bit stream;

circuitry for forming multiple digital beams from said digital bit stream; and

a digital receiver for converting said digital beamforms into an information signal.

2. The antenna of claim 1, wherein said plurality of radiation elements are a plurality of parallel cross-slotted waveguides.

3. The antenna of claim 2, wherein each of said plurality of parallel cross-slotted waveguides includes a slotted septum therein.

4. The antenna of claim 1, wherein said circuitry for forming multiple digital beams does so through FFT techniques.

5. The antenna of claim 1, wherein said antenna may be utilized on a mobile vehicle.

6. The antenna of claim 1, wherein, said radiation elements form multiple beams for communicating with a plurality of satellites in an equitorial satellite constellation.

7. A phased array antenna for an equitorial satellite constellation, comprising:

a rotating plate for mechanically scanning for a wavefront of wave signals in an azimuth direction;

a plurality of radiation elements positioned on said rotating plate for receiving a plurality of individual waves;

apparatus for positioning said radiation elements such that a wavefront of an intended signal will be in alignment with a major axis of said plurality of radiation elements;

a plurality of multiplexer devices, each in communication with one of said plurality of radiation elements for converting said plurality of received individual waves into an analog bit stream;

an analog to digital converter for converting said analog bit stream to a digital bit

stream;

a device for forming multiple digital beam forms from said digital bit stream; and

a digital receiver for processing said multiple digital beams.

8. The antenna of claim 7, wherein said device for forming multiple digital beam forms utilizes a FFT technique to provide for retrodirectivity.

9. The antenna of claim 7, wherein said antenna transmits said multiple digital beams to a plurality of satellites in the equitorial satellite constellation.

10. The antenna of claim 8, wherein said plurality of radiation elements are a plurality of interdigitally spaced slotted wave guides.

11. The antenna of claim 7, wherein said rotating plate is generally circular in shape.

12. The antenna of claim 11, wherein each of said plurality of interdigitally spaced slotted waveguides includes a slotted septum therein.

13. A method for forming multiple beams at a commercial satellite antenna, comprising:

providing a plurality of radiation elements

on a surface of said commercial satellite antenna for receiving a plurality of individual wave signals;

rotating said plurality of radiation elements such that a wavefront of said plurality of individual wave signals is in alignment with a major axis of said plurality of radiation elements;

consolidating said plurality of wave signals into a single analog signal;

forming multiple beam forms from said single analog signal; and

transmitting said multiple beam forms to a plurality of satellites in an equitorial satellite constellation.

14. The method of claim 13, further comprising;

converting said single analog signal to a digital bit stream; and

forming multiple digital beam forms from said digital bit stream.

15 The method of claim 14, further comprising:

utilizing FFT techniques to form said multiple digital beam forms to provide for satellite retrodirectivity.

16. The method of claim 14, further comprising:

processing said multiple digital beam forms

prior to transmitting.

17. The method of claim 14, wherein said plurality of radiation elements electronically scan for said wave signals in elevation.

18. The method of claim 17, wherein said surface of said antenna is comprised of a generally circular plate that rotates for scanning mechanically for said wave signals in azimuth.

19. The method of claim 18, wherein said plurality of radiation elements are a plurality of cross-slotted waveguides.

20. The method of claim 19, wherein said plurality of cross-slotted waveguides are parallel and interdigitally spaced with respect to each other.